

Amendment under PCT Article 34 filed on March 8, 2006

CLAIMS

5 1. Claim 1 must be amended as attached sheet.

CLAIMS

1. (Amended) A fluid conveying machine comprising:
 - a rotational shaft;
 - 5 a double suction type centrifugal pump, said double suction type centrifugal pump having a double suction type impeller attached to said rotational shaft for pressurizing a fluid in a centrifugal direction, a pump casing disposed so as to surround said impeller, and a pressure balance mechanism for positioning said rotational shaft in an axial direction; and
 - 10 magnetic levitation motors, each of said magnetic levitation motors having a function as a radial magnetic bearing for supporting said rotational shaft in a non-contact manner and a function as a motor for rotating said rotational shaft,
wherein said pump is disposed substantially at a center of said rotational shaft in the axial direction,
 - 15 wherein two magnetic levitation motors are disposed on both sides of said pump.
- 2.
3. The fluid conveying machine as recited in claim 1, wherein said pump casing
20 having a double volute.
4. The fluid conveying machine as recited in claim 1, wherein said pump casing having a diffuser.
- 25 5. The fluid conveying machine as recited in claim 1, wherein said pressure balance mechanism has a pair of variable clearances between each side of said impeller and said pump casing to balance pressures on both sides of said impeller by sizes of said pair of variable clearances.

6. The fluid conveying machine as recited in claim 1, wherein said magnetic levitation motor includes

a stator for forming two rotating magnetic fields, numbers of poles of which are different from each other by two, and

5 a rotor rotated and magnetically supported by said two rotating magnetic fields.